

PERFORMANCE SPECIFICATION

COILS, ELECTRICAL, FIXED AND VARIABLE, RADIO FREQUENCY
GENERAL SPECIFICATION FOR

This supplement forms a part of MIL-PRF-15305F, dated 6 May 2013.

MS SHEETS

- * MS14040 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
- * MS14041 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
- * MS14043 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
- * MS14046 - Coils, Radio Frequency, Molded, Fixed, Microminiature (Iron Core).
- * MS14047 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
- * MS14048 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
- * MS14049 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
- * MS14050 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
- * MS14052 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
- * MS18100 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Phenolic Core).
- * MS18130 - Coils, Radio Frequency, Molded, Fixed, Microminiature (Phenolic Core).
- MS21363 - Coils, Radio Frequency, Molded, Fixed, Microminiature, Magnetically Shielded, (Ferrite Core-Ferrite Sleeve).
- MS21367 - Coils, Radio Frequency, Encapsulated, Fixed, Microminiature, Shielded (Iron Core).
- * MS21380 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
- * MS21381 - Coils, Radio Frequency, Molded, Variable, Subminiature, Magnetically Shielded (Iron Core).
- * MS21388 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
- * MS21389 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Phenolic Core).
- * MS21390 - Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
- * MS21399 - Coils, Radio Frequency, Molded, Fixed, Microminiature, Magnetically Shielded (Phenolic Core-Iron Sleeve).
- * MS21400 - Coils, Radio Frequency, Molded, Fixed, Microminiature, Magnetically Shielded (Iron Core-Iron Sleeve).
- * MS21401 - Coils, Radio Frequency, Molded, Fixed, Microminiature, Magnetically Shielded (Ferrite Core-Ferrite Sleeve).
- * MS21402 - Coils, Radio Frequency, Molded, Variable, Subminiature, Magnetically Shielded (Ferrite Core).

MIL-PRF-15305F
SUPPLEMENT 1

MS21422	-	Coils, Radio Frequency, Molded, Fixed, Subminiature.
MS21423	-	Coils, Radio Frequency, Molded, Fixed, Subminiature.
MS21424	-	Coils, Radio Frequency, Molded, Fixed, Subminiature.
MS21426	-	Coils, Radio Frequency, Molded, Fixed, Microminiature, Magnetically Shielded (Iron Core-Iron Sleeve).
MS21427	-	Coils, Radio Frequency, Molded, Fixed, Microminiature, Magnetically Shielded (Ferrite Core-Ferrite Sleeve).
* MS53229	-	Coils, Radio Frequency, Encapsulated, Variable, Microminiature (Iron Core).
* MS53230	-	Coils, Radio Frequency, Encapsulated, Variable, Microminiature (Ferrite Core).
* MS53231	-	Coils, Radio Frequency, Encapsulated, Variable, Microminiature (Iron Core).
* MS53232	-	Coils, Radio Frequency, Encapsulated, Variable, Microminiature (Ferrite Core).
* MS53233	-	Coils, Radio Frequency, Encapsulated, Variable, Microminiature (Iron Core).
* MS53234	-	Coils, Radio Frequency, Encapsulated, Variable, Microminiature (Ferrite Core).
* MS75008	-	Coils, Radio Frequency, Molded, Fixed, Subminiature (Phenolic Core).
* MS75052	-	Coils, Radio Frequency, Molded, Fixed, Subminiature (Phenolic Core).
* MS75083	-	Coils, Radio Frequency, Molded, Fixed (Phenolic Core).
* MS75084	-	Coils, Radio Frequency, Molded, Fixed (Iron Core).
* MS75085	-	Coils, Radio Frequency, Molded, Fixed (Ferrite Core).
* MS75087	-	Coils, Radio Frequency, Molded, Fixed, Microminiature, Magnetically Shielded (Phenolic Core-Iron Sleeve).
* MS75088	-	Coils, Radio Frequency, Molded, Fixed, Microminiature, Magnetically Shielded (Iron Core-Iron Sleeve).
* MS75089	-	Coils, Radio Frequency, Molded, Fixed, Microminiature, Magnetically Shielded (Ferrite Core-Ferrite Sleeve).
* MS75101	-	Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
* MS75103	-	Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
* MS90537	-	Coils, Radio Frequency, Molded, Fixed, Subminiature, Shielded, Magnetic.
* MS90538	-	Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
* MS90539	-	Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
* MS90540	-	Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
* MS90541	-	Coils, Radio Frequency, Molded, Fixed, Subminiature (Iron Core).
* MS90542	-	Coils, Radio Frequency, Molded, Fixed, Subminiature (Phenolic Core).
* MS90543	-	Coils, Radio Frequency, Molded, Variable (Powdered Iron Core).
* MS90546	-	Coils, Radio Frequency, Molded, Variable (Ferrite Core).
* MS91189	-	Coils, Radio Frequency, Molded, Fixed, Subminiature (Phenolic Core).

* Indicates inactive for new design.

MIL-PRF-15305F
SUPPLEMENT 1

COIL RF, (FIXED), (AXIAL LEADS) (105°C).

Military Standard	Inductance μ H	Inductance tolerance	Rated dc current mA	Q min.	Max. dimensions		Shielded
					Dia. (inches)	Length (inches)	
MS75087	.10 to .82	$\pm 10\%$	1,790 to 370	50 to 40	.172	.430	Yes
MS21399	.10 to .82	$\pm 10\%$	1,038 to 447	42 to 35	.146	.523	Yes
MS21426	.10 to 100	$\pm 10\%$	670 to 51	54 to 40	.105	.260	Yes
MS75088	1.0 to 12	$\pm 10\%$	1,070 to 200	44 to 55	.172	.430	Yes
MS21400	1.0 to 12	$\pm 10\%$	678 to 173	38 to 51	.146	.523	Yes
MS75084	1.2 to 27	$\pm 10\%$	590 to 135	25 to 50	.105	.260	---
MS75101	3.3 to 27	$\pm 10\%$	990 to 205	30 to 65	.219	.469	---
MS14046	5.6 to 33	$\pm 10\%$	495 to 165	45 to 65	.166	.385	---
MS14052	5.6 to 39	$\pm 10\%$	885 to 224	35 to 70	.230	.570	---
MS75089	15 to 100,000	$\pm 10\%$	315 to 11	45 to 18	.172	.430	Yes
MS21363	15 to 100,000	$\pm 5\%$	315 to 11	45 to 18	.172	.430	Yes
MS21401	15 to 10,000	$\pm 10\%$	314 to 18	45 to 50	.146	.523	Yes
MS75103	22 to 120	$\pm 10\%$	725 to 195	50 to 95	.313	1.000	---
MS75085	33 to 1,000	$\pm 10\%$	130 to 28	45 to 30	.105	.260	---
MS90538	36 to 240	$\pm 5\%$	180 to 101	60 to 65	.165	.385	---
MS14047	68 to 150	$\pm 10\%$	168 to 132	70 to 75	.260	.570	---
MS21427	120 to 560	$\pm 10\%$	88 to 40	31 to 36	.105	.206	Yes
MS14048	180 to 390	$\pm 10\%$	148 to 118	80 to 75	.320	.570	---
MS90539	270 to 1,000	$\pm 5\%$	110 to 78	65 to 60	.200	.450	---
MS14049	470 to 1,000	$\pm 10\%$	125 to 95	80 to 70	.385	.635	---
MS90540	1,100 to 3,600	$\pm 5\%$	78 to 57	60 to 70	.225	.570	---
MS14050	1,500 to 10,000	$\pm 10\%$	84 to 47	85 to 70	.478	.697	---
MS90541	3,900 to 10,000	$\pm 5\%$	61 to 47	80	.250	.750	---

MIL-PRF-15305F
SUPPLEMENT 1

COIL RF, (FIXED), (AXIAL LEADS) (125°C).

Military Standard	Inductance μ H	Inductance tolerance	Rated dc current mA	Q min.	Max. dimensions		Shielded
					Dia. (inches)	Length (inches)	
MS75083	.10 to 1.0	$\pm 10\%$	1,350 to 385	40 to 25	.105	.260	---
MS21389	.10 to 2.2	$\pm 20\%$ to $\pm 10\%$	4,000 to 610	75 to 45	.188	.440	---
MS90537	.10 to 100,000	$\pm 10\%$	2,900 to 22	50 to 18	.167	.415	Yes
MS75008	.15 to 2.7	$\pm 20\%$ to $\pm 10\%$	3,000 to 460	55 to 30	.219	.469	---
MS18130	.15 to 4.7	$\pm 20\%$ to $\pm 10\%$	2,450 to 260	50 to 33	.166	.385	---
MS90542	.47 to 4.7	$\pm 10\%$	1,970 to 360	65 to 40	.230	.570	---
MS21388	1.0 to 2,000	$\pm 20\%$ to $\pm 5\%$	2,700 to 100	100 to 70	.250	.600	---
MS21380	1.0 to 10,000	$\pm 10\%$ to $\pm 5\%$	4,000 to 80	130 to 65	.310	.900	---
MS91189	1.2 to 18	$\pm 10\%$	2,400 to 315	60 to 40	.313	1.000	---
MS21390	2.7 to 1,000	$\pm 10\%$ to $\pm 5\%$	1,600 to 104	55 to 60	.188	.440	---
MS75052	47 and 56	$\pm 10\%$	195 and 185	18	.260	.570	---

COIL RF, (FIXED), (RADIAL LEADS) (105°C).

Military Standard	Inductance μ H	Inductance tolerance	Rated dc current mA	Q min.	Max. dimensions		Shielded
					Dia. (inches)	Length (inches)	
MS21367	.015 to 10	$\pm 20\%$ to $\pm 10\%$	492 to 53	40 to 40	.110	.110	Yes
MS14040	5.6 to 39	$\pm 10\%$	760 to 198	35 to 60	.266	.756	---
MS14041	68 to 150	$\pm 10\%$	165 to 132	45 to 60	.313	.656	---
MS14043	470 to 1,000	$\pm 10\%$	125 to 99	50 to 35	.468	.656	---
MS14044	1,500 to 10,000	$\pm 10\%$	82 to 49	55 to 40	.531	.856	---

MIL-PRF-15305F
SUPPLEMENT 1

COIL RF, (FIXED), (RADIAL LEADS) (125°C).

Military Standard	Inductance μ H	Inductance tolerance	Rated dc current mA	Q min.	Max. dimensions		Max distance between leads (inches)
					Dia. (inches)	Length (inches)	
MS21423	.01 to 1.0	$\pm 20\%$ to $\pm 10\%$	3,000 to 700	60 to 70	.210	.230	.110
MS21422	.10 to 10	$\pm 10\%$ to $\pm 5\%$	2,200 to 280	55 to 60	.210	.230	.110
MS18100	.47 to 4.7	$\pm 20\%$ to $\pm 10\%$	1,800 to 325	50 to 40	.266	.756	.610
MS21424	10 to 1,000	$\pm 5\%$	550 to 110	75 to 50	.280	.300	.210

COIL RF, (VARIABLE), (RADIAL LEADS).

Military Standard	Inductance max. μ H	Rated dc current mA	Q min.	Max. dimensions		Shielded	Max. distance between pins (inches)
				Dia. or width (inches)	Length (inches)		
MS21381	.105 to 90.2	1,510 to 174	45 to 67	.300	.400	Yes	.200
MS21402	110 to 110,000	180 to 13	76 to 48	.300	.400	Yes	.200
MS53229	.025 to 8.2	250 to 50	50 to 25	.200	.275	---	.100
MS53230	10 to 1,000	57 to 11	25 to 20	.200	.275	---	.100
MS53231	.025 to 8.2	250 to 50	50 to 25	.097	.475	---	.180
MS53232	10 to 1,000	57 to 11	25 to 20	.097	.475	---	.180
MS53233	.025 to 8.2	250 to 50	50 to 25	.280	.450	---	.218
MS53234	10 to 1,000	57 to 11	25 to 20	.280	.450	---	.218
MS90543	.28 to 56,000	1,800 to 19	100 to 30	.400	.952	---	.600
MS90546	.40 to 70,000	1,800 to 19	100 to 25	.400	.952	---	.600

Custodians:
Army - CR
Navy - EC
Air Force - 85
DLA - CC

Preparing activity:
DLA - CC

(Project 5950-2013-029)

Review activities:
Army AR, CR4, MI
Navy - AS, CG, OS, SH
Air Force 19, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.